

ABSTRACT OF THE DISCLOSURE

The present invention relates to a sample analysis system with chip-based electrophoresis device, particularly, the chip electrophoresis is connected to the dynamic flow-based auto-sampling device to introduce the sample into the chip-based electrophoresis device. By utilizing the derivatization biochemistry method to have a surface modification on the sample loading channel, it prevents the sample from being adhered to the wall of the sample loading channel, and hence increases the sample loading rate, reduces cross-contamination of samples and performs specific bio-reaction by using the immobilization of matter including antigen, antibody, protein, or enzyme. This invention makes use of the continuous split flow and electric voltage control to work with the detecting unit, signal collecting unit, and signal processing unit so that the sample undergoes a timely, fast, continuous analysis without having interference from the sample of other time.